

1 **51891/GSL/I122**

WHAT IS CLAIMED IS:

5 1. A film advance mechanism comprising
 film input mechanism for moving film along a path past an
 aperture;
 film take-up mechanism taking up film having passed the
 aperture;
10 first and second rows of register pins arranged in linear
 fashion along opposite edges of the path between the film
 input mechanism and the film take-up mechanism for engaging
 perforated openings on the film; and
 a rotary air valve adjacent the film input mechanism for
15 advancing the film by air.

 2. The film advance mechanism of claim 1 wherein the
 film is formed into a loop by closure of the rotary air valve
 with the loop propelled past the aperture by opening of the
20 rotary air valve.

 3. The film advance mechanism of claim 1 further
 comprises an air pressure source which provides a constant
 flow of air to the rotary air valve as the loop of film is
25 formed to propel the loop of film past the aperture.

 4. The film advance mechanism of claim 2 wherein the
 loop in the film is metered by opening and closing the rotary
 air valve relative to opening and closing a shutter.
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 5. The film advance mechanism of claim 1 wherein the
 rotary air valve operates at a pressure of about 2 to about 3
 inches of water.

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6. A method for advancing film in a motion picture device such as a camera or projector, comprising:

5 providing a take-off spool to supply film;
 forming a loop in the film at an entrance to an aperture position by closure of a rotary air valve.

 blowing the loop across the aperture position and toward a film take-up spool by opening the rotary air valve; and
10 releasing successive loops of film to be blown across the aperture position by timing the opening and closing of the air valve relative to opening and closing a shutter.

7. The method of claim 6 further comprising delivering
15 a constant source of air to the rotary air valve.

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